

10/523604
DT01 Rec'd PCT/PTC 04 FEB 2005

IN THE CLAIMS

1. (original): A method of forming an OLED element or display having two or more OLED layers, which method comprises providing a blocking layer by printing with an ink in a desired pattern between two of the OLED layers, whereby, in use, conduction across the OLED element or display is reduced in the area of the pattern.
2. (original): A method of forming an OLED element or display as claimed in claim 1 wherein the ink is coloured to increase contrast.
3. (original): A method of forming an OLED element or display as claimed in claim 1 or 2 wherein the blocking layer is located between an electroluminescent layer and either an anode or cathode of the OLED element or display.
4. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the blocking layer pattern comprises a multiplicity of discrete points of ink.
5. (original): A method of forming an OLED element or display as claimed in claim 4 wherein the discrete points of ink are less than about 100 μm in size.
6. (original): A method of forming an OLED element or display as claimed in claim 4 or 5 wherein the pattern comprises regions with different densities of the discrete points.
7. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the ink is insoluble in the medium used to deposit underlying and/or overlying OLED layers.
8. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the ink comprises a medium which is a liquid which does not dissolve the layer on which the ink is printed.

9. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the ink further comprises a colorant, a polymeric binder and/or functional additives.

10. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the ink is deposited by a direct printing technique selected from ink-jet printing, screen printing, microcontact printing, stamping, soft lithography or electrophotographic printing using a liquid or solid toner.

11. (original): A method of forming an OLED element or display as claimed in claim 10 wherein the ink is deposited by ink-jet printing.

12. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the ink blocking layer is thicker than the OLED layer(s) subsequently deposited onto it.

13. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the ink blocking layer thickness is from 100 nm to 100 μ m thick.

14. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the OLED layer(s) to be deposited are independently applied by a coating or printing technique selected from solution-, spin-, spray-, dip-, web-, die- or evaporation coating; electroless deposition and ink-jet printing, screen printing, microcontact printing, stamping or soft lithography.

15. (currently amended): A method of forming an OLED element or display as claimed in ~~any one preceding~~ claim 1 wherein the wetting of the ink includes a surface treatment of the layer on which the ink is deposited.

16. (currently amended): An OLED element or display obtainable by a method as claimed in ~~any one preceding~~ claim 1.

17. (original): An OLED display as claimed in claim 16 which, in use, produces a pseudo 3-D image.